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NEW VELIIDAE (HEMPITERA) FROM CENTRAL AMERICA.

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This paper contains the descriptions of three new species of *Velia* Latreille and one *Rhagovelia* Mayr from Central America. The disposition of the types is given beneath the description of each species.

Velia virtutis, n. sp.

Moderately large, robust. Chocolate brown, prettily marked with white and bluish; clothed with golden pubescence. Head dark, with the usual impressed lines. Eyes dark red. Antennae long, slender, moderately clothed with dark hairs, segment I moderately stout, slightly curved, much stouter than others; proportions, 40 : 46 : 46 : 41. Rostrum stout, brownish, the basal segments paler, the tip shining black, reaching to metasternum. Legs moderately long and slender, brown, conspicuously marked with white; acetabula strongly pitted. Legs with coxae, trochanters, basal half of femora, an indistinct ring before apex of femora, another near base of tibiae, a narrow band at middle of tibiae and most of second segment of middle and hind tarsi white. Anterior tarsi with first segment short and slender, third as long as the two preceding. Intermediate legs with first tarsal segment very short, second long, a little longer than third. Hind legs with first tarsal segment slightly shorter than second, third longest, the femora with numerous fine, blackish, denticulations in a wide irregular row on hind margin of apical half, the tibiae also finely denticulate within.

Winged form.—Pronotum strongly developed, strongly, coarsely pitted, behind strongly roundly produced, brown at apex, in front with a white spot on each side, humeri prominent. Hemelytra chocolate brown, an elongate oval spot at the base and three oval ones near the apex white; with four elongate spots opposite base of pronotum and six irregular spots on disc of membrane bluish, silvery between the segments. Male claspers long, narrow, moderately curved, somewhat tapering. Last genital segment beneath on each side where clasper emerges with its margin excavated and then produced into a blunt point. Last venter distinctly, transversely impressed, the hind margin deeply roundly excavated. First genital segment swollen along median line, the hind margin broadly roundly produced.

Female.—Markings as in male. Last venter not excavated behind.

Length, 5.50–6.00 mm.; width at humeri, about 2 mm.

Holotype, winged male, Barro Colorado Island, W. C. Allee; *allotype*, female, taken with type, U. S. National Museum. *Paratypes*, two females, Tobago Island, Panama, Aug. 6, 1934, L. Rozeboom, and one female, Port Sherman, Canal Zone, R. C. Shannon, Sept. 6, 1923.

This is a very striking *Velia*. The white markings on the legs are somewhat variable in character as are also the wing spots. The writers had questionably identified this species as *virgata* White but were informed by Dr. H. B. Hungerford that it is very distinct and not easily confused with *virgata*, the type of which he examined in Europe.

Velia recens, n. sp.

Brown, the hemelytra with a large elongated spot near the base and a shorter, obovate one near the apex white, the sides of pronotum in front with a whitish luster. Head with usual impressed lines. Eyes reddish brown. Antennae brownish, moderately hairy. First segment curved, enlarged toward apex; proportion of segments, 28 : 18 : 24 : 26. Pronotum not very tumid above, coarsely pitted, rather sharply rounded behind, the median carina distinct in front. Connexiva concolorous. Rostrum extending almost to end of mesosternum. Legs rather stout, moderately long, dark brown, the coxae, trochanters and basal portion of femora yellowish brown.

Male.—Slightly smaller than female. Last segment of venter roundly excavated behind but not distinctly notched at the middle. Clasper slightly tapering from the base, curved, the apex faintly recurved.

Female.—Slightly stouter than male. Very similar in color and markings. *Length*, 4.41 mm.; width, 1.56 mm.

Holotype, winged male, Monte Sirio, Gatuneillo River, Canal Zone, Panama; *allotype*, female, Porto Bello, Panama, authors' collection.

This species has somewhat the coloration of *V. myseri* Hungerford but is readily recognized by its size, proportions, and male clasper.

Velia egregia, n. sp.

Moderately large, robust, brown, legs annulate with paler markings. Head with usual impressed markings. Antennae, brown, long, slender, clothed with numerous long hairs, the first segment only slightly enlarged, moderately curved; proportions, 56 : 38 : 40 : 37. Legs densely clothed with long hairs, brown; coxae, trochanters, basal part of all femora, a broad band near the middle of each tibia, and most of femora beneath pale yellowish-testaceous, also a narrow indistinct ring near apex of femora and on base of tibiae of all legs.

Winged form.—Pronotum dark brown, coarsely pitted, moderately swollen, humeri moderately prominent; median carina fairly distinct. Hemelytra with a large elongate spot near the base and three spots near the apex white. Connexiva with silvery spots between the segments, these indistinct basally.

Wingless form.—Pronotum much shorter, broadly rounded behind, the basal half darker. Connexivum very broad, brown, with silvery spots as in winged form. Dorsum brownish black, the last three segments with a silvery luster.

Male.—Clasper short, stout at base, strongly curved, forming a somewhat hook-like structure. Last venter deeply roundly excavated on hind margin.

Female.—Slightly stouter than male. Abdomen truncate behind.

Size.—Length, 5.31 mm.; width, 1.85 mm.

Holotype.—Winged male, Panama, Oct. 28, 1934, and *allotype*, winged female, Las Gracias, Panama, Feb. 25, 1935, collected by Dr. L. Rozeboom, collection of authors. *Paratypes*, apterous male, Juan Dica, Panama, Feb. 2, 1935, L. Rozeboom; apterous female, La Caja, San Jose, Costa Rica, 1934, Schmidt (Vienna Museum) and apterous male and female taken with *allotype*. Belongs to the *stagnalis* group of the genus and recognized by the shape of the claspers.

Rhagovelia panda, n. sp.

Moderately large, blackish, thickly clothed with golden pubescence. Antennal formula, 54 : 34 : 30 : 26; first and second segments with a few bristly hairs, the first with basal half yellowish. Rostrum extending on basal portion of mesosternum.

Apterous form.—Pronotum long, indistinctly carinate, broadly rounded behind; in front broadly yellowish.

Winged form.—Pronotum broadly yellowish in front as in apterous form, indistinctly carinate, triangularly produced behind, the humeri prominent.

Male.—Hind femora strongly developed, in some individuals enormously enlarged, armed beneath with numerous irregularly placed, black teeth of various sizes. Coxae, and trochanters, the femora beneath and base and sides within yellowish white. Intermediate tarsi with segment III longer than II (35 : 47). Hind tibiae nearly straight or strongly curved, denticulate beneath, armed at apex with straight spur and before apex usually with three large, stout teeth. Connexiva yellowish white, the narrow margin and a broad basal stripe above blackish. Venter with a very prominent median carina extending to last segment, distinctly impressed on each side of carina; last segment yellowish, scarcely excavated behind. Clasper long, narrow, slightly curved, faintly narrowed towards apex.

Female.—Color markings about as in male. Hind femora moderately swollen, with a large curved tooth just before middle, thence to apex with two rows of shorter black teeth; hind tibia nearly straight, finely denticulated.

Length, 4.90–6.00 mm.; width, 2.00 mm.

Holotype, apterous male; *allotype*, winged female, and *paratypes* several apterous and macropterous males and females, Chiquimula, Guatemala, June, 1930; authors' collection.

The authors desire to express their appreciation to Mr. W. E. China of the British Museum for comparing this species with the type of *R. femoralis* Champion. The clasper is longer and narrower at the base than in *femoralis*. The last segment of the intermediate tarsi is slightly longer than the second. The venter, in some specimens, is mostly yellowish, also the coxae and trochanters. The hind trochanters are armed with two or three short teeth in the male.

